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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,389	08/23/2006	Hideobu Mikami	1007-035	6987

7590 10/09/2009
James V Costigan
Hedman & Costigan
1185 Avenue of the Americas
New York, NY 10036-2646

EXAMINER

GOLOBOY, JAMES C

ART UNIT	PAPER NUMBER
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1797

MAIL DATE	DELIVERY MODE
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10/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,389	Applicant(s) MIKAMI, HIDENOBU	
	Examiner James Goloboy	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hatakeyama (U.S. Pat. No. 5,589,444).

In Table 1, example 9, Hatakeyama discloses a grease comprising a base oil, a thickener (diurea), and 2.0% by weight of a molybdenum dithiocarbamate extreme pressure agent. In footnote 13, Hatakeyama teaches that the molybdenum dithiocarbamate is Molyvan 822, which according to Table 1 of the current specification has 2.6 mgS/g active sulfur. The product of the amount of active sulfur and the amount of molybdenum dithiocarbamate is 5.2, within the range recited in claim 1. The grease of Hatakeyama's example 9 therefore meets the limitations of claims 1 and 3-4. The grease of Hatakeyama additionally comprises 0.5% of a sulfur-phosphorus extreme pressure agent, which according to footnote 11 is Anglamol 99. While the active sulfur content of Anglamol 99 is not disclosed, due to the low concentration it is clear that the

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sum of the products for Molyvan 822 and Anglamol 99 in example 9 of Hatakeyama will fall within the range recited in claim 2, and the composition will therefore meet claim 2.

As the greases of Hatakeyama must be formed by adding the thickener and the extreme pressure agent(s) to base oil, claim 5 is met as well.

3. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeuchi (U.S. Pat. No. 5,604,187).

In Table 1, example 3, Takeuchi discloses a grease comprising a base oil, a thickener (diurea), and 2.0% by weight of an extreme pressure agent. In footnote 4, Takeuchi teaches that the extreme pressure agent is Anglamol 33, which according to Table 1 of the current specification has 2.8 mgS/g active sulfur. The product of the amount of active sulfur and the amount of extreme pressure agent is 5.6, within the range recited in claim 1. The grease of Takeuchi's example 3 therefore meets the limitations of claims 1 and 3-4. As the grease of Takeuchi must be formed by adding the thickener and the extreme pressure agents to base oil, claim 5 is met as well.

4. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kondo (U.S. Pat. No. 6,037,314).

In Table 1, example 8, Kondo discloses a grease comprising a base oil, a thickener (diurea), and 3.0% by weight of a molybdenum dithiocarbamate extreme pressure agent. In footnote 5, Kondo teaches that the molybdenum dithiocarbamate is Molyvan 822, which according to Table 1 of the current specification has 2.6 mgS/g

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active sulfur. The product of the amount of active sulfur and the amount of molybdenum dithiocarbamate is 7.8, within the range recited in claim 1. The grease of Kondo's example 9 therefore meets the limitations of claims 1 and 3-4. As the grease of Kondo must be formed by adding the thickener and the extreme pressure agents to base oil, claim 5 is met as well.

5. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Bailey (U.S. Pat. 4,110,233).

In Table 5, Bailey discloses numerous grease compositions comprising a base oil, a lithium soap thickener, and 4.50% by weight of an additive package. In Table 4 Bailey teaches that that additive package comprises 33.33% by weight of Anglamol 33 (sulfurized hydrocarbon), leading to a concentration of 1.5% by weight Anglamol 33 in the overall grease. According to Table 1 of the current specification, Anglamol 33 has 2.8 mgS/g active sulfur. The product of the amount of active sulfur and the amount of extreme pressure agent is 4.2, within the range recited in claim 1. The grease of Bailey therefore meets the limitations of claims 1 and 3-4. As the grease of Iso must be formed by adding the thickener and the extreme pressure agents to base oil, claim 5 is met as well.

6. Claims 1 and 3-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Iso (U.S. Pat. No. 2005/0261141).

In the abstract, Iso discloses a rolling bearing comprising a grease. In Table 11, example 9-4, Iso discloses a sample grease comprising a base oil, a diurea thickener, and 2.0% by weight of a zinc dithiocarbamate. In paragraph 487 Iso discloses that the zinc dithiocarbamate is Vanlube AZ, which according to Table 1 of the current specification has 1.9 mgS/g active sulfur. The product of the amount of active sulfur and the amount of molybdenum dithiocarbamate is 3.8, within the range recited in claim 1. . The grease of Iso's example 9-4 therefore meets the limitations of claims 1 and 3-4. As the grease of Iso must be formed by adding the thickener and the extreme pressure agents to base oil, claim 5 is met as well. The rolling bearing comprising the grease meets the limitations of claim 6. In paragraph 93 and figure 1 Iso teaches that the rolling bearing can be a ball bearing, meeting the limitations of claim 7.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Suzuki (U.S. Pat. No. 5,952,273) discloses in Tables 1-2 grease compositions comprising Molyvan 822 and Anglamol 33.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Goloboy whose telephone number is (571)272-2476. The examiner can normally be reached on M-F 9-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCG

/Glenn A Caldarola/
Acting SPE of Art Unit 1797